



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/732,911	12/10/2003	Bruce J. Cardinal	ETWSP002	6813

21912 7590 06/21/2005
VAN PELT, YI & JAMES LLP
10050 N. FOOTHILL BLVD #200
CUPERTINO, CA 95014

EXAMINER

BAHTA, KIDEST

ART UNIT	PAPER NUMBER
----------	--------------

2125

DATE MAILED: 06/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/732,911

Applicant(s)

CARDINAL ET AL.

Examiner

Kidest Bahta

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-63 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-63 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oliver (U.S. Patent 5,870,302) in view of Peek et al. (U. S. Patent 6,675,098).

Regarding claims 1-3, 5-6, 20-21, 30-33 and 59-60, Oliver discloses that receiving landscape and environmental information and deriving an irrigation schedule based on the landscape information and the environmental information; and sending the irrigation schedule to an irrigation control unit (Abstract, Fig. 6).

Peak discloses displaying via a web interface an effect of modifying the individual irrigation schedule via the web interface (Fig. 8, i.e., although irrigation can be scheduled using ET and hours needed as shown in FIG. 8. The farmer also needs to confirm that water was actually applied when and in the amounts scheduled. The farmer accomplishes this by making manual soil moisture measurements that require expensive visits to the field. If the soil moisture can be measured and reported to the farmer *over the Internet and displayed on his computer's display device*, this will confirm that the proper amount of water was provided at the proper time); the irrigation schedule is sent to the irrigation control unit via network and Internet (Fig. 14, Fig. 16 and Fig. 17) and in addition, the information of the irrigation is view via Web (Fig. 14, element 388, i.e., server system).

It would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify the teachings of Oliver with the teachings Peek in order to provide the easy and fast communication.

Regarding claims 4, 7-20, 23-29 and 34-58, Oliver discloses the environmental information includes evapotranspiration (ET) information (abstract); the environmental information includes weather information (column 5, lines 56-65); the irrigation schedule includes a restriction on the amount of water used (column 6, lines 25-30); the irrigation schedule includes balancing usage with other sites (column 14, line 52); the irrigation schedule includes accounting for needs of the most demanding plant (column 8, lines 20-28); deriving the irrigation schedule includes selecting an algorithm used for deriving the irrigation schedule from a plurality of algorithms (column 17 and column 18); sending the irrigation schedule to an irrigation control unit is initiated by the irrigation control unit (column 1, lines 15-18); sending the irrigation schedule to an irrigation control unit is initiated by the irrigation control unit and the irrigation control unit uses a pull model to request the irrigation schedule (Fig. 10); in the event that sending the irrigation schedule fails, further comprising providing an alert (column 9, lines 60-67); performing irrigation using stored irrigation schedule on the irrigation control unit (column 10, lines 22-25); uploading meter data from the irrigation control unit to a central control (column 8, lines 30-37), the landscape information includes irrigation method (column 1, lines 15-20), precipitation rate (column 3, lines 10-15), distribution uniformity (column 14, lines 9-10); root depth of plant (column 5, line 45), and number of emitters per plant and flow rate of emitter (column 9, lines 66-65), sun exposure

Art Unit: 2125

information (Fig. 4); plant coefficient by month (column 8, line 65-column 9, line 4); the irrigation schedule is optimized for one or more stations (column 4, lines 5-8; column 15, line 35); multiple stations operating simultaneously (Fig. 6); the irrigation schedule is derived using station flow rates and maximum allowable system flow (column 15, lines 16-19) and automatically adjusted for rainfall (column 2, lines 50-53); deriving the irrigation schedule includes minimizing runoff (column 1, lines 55); the irrigation schedule includes hourly restrictions (column 7, lines 20-21); the irrigation schedule includes non-watering days (column 7, lines 8-15); deriving the irrigation schedule includes accounting for the priority of stations (column 11, lines 51-61); landscape information includes seasonality of plants (column 5, lines 45); the irrigation schedule is derived using station flow rates provided by a flow sensor (column 8, lines 30-32); the irrigation schedule is optimized to fit within a user-defined water window (column 1, lines 39-55); the irrigation schedule includes individual station schedules derived using a plurality of algorithms and selecting an algorithm based on an irrigation method and geographic location (column 7, lines 16-30, column 17-18).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kidest Bahta whose telephone number is 571-272-3737.


The examiner can normally be reached on Monday - Friday.

Art Unit: 2125

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571-272-3749. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application information Retrieval IPAIRI system. Status information for published applications may be obtained from either Private PMR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAG system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kidest Bahta


June 16, 2005